

MAY 10 2002

Attachment 6

K 020453 1/2

510(K) Summary of Safety and Effectiveness

This 510(K) Summary of Safety and Effectiveness for the Palomar EsteLux™ Pulsed Light System is submitted in accordance with the requirements of Safe Medical Device Act (SMDA) of 1990 and follows the Office of Device Evaluation (ODE) guidance concerning the organization and content of a 510(K) summary.

**Applicant:** Palomar Medical Technologies, Inc.

**Address:** 82 Cambridge St.  
Burlington, MA 01803  
781-993-2300

**Contact Person:** Marcy Moore

**Telephone:** 919-363-2432

**Preparation Date:** February 6, 2002

**Device Trade Name:** Palomar EsteLux™  
and CoolRoller™

**Common Name:** EsteLux™, CoolRoller™

**Classification Name:** Laser surgical instrument for use in General and  
Plastic Surgery and in Dermatology  
(see: 21 CFR 878-4810).  
Product Code: GEX  
Panel: 79

**Legally-Marketed Predicate Device:** ESC IPL Quantum HR; K991935  
Laserscope CoolSpot™; K984110

**System Description:**

The EsteLux™ is a light-based medical device designed for permanent hair reduction, effective removal of unwanted hair, treatment of facial and leg veins, and treatment of pigmented lesions in all skin types (I-VI). The CoolRoller™ is an accessory providing pre-cooling of the skin, reduction in thermal injury, and reduction in pain and patient discomfort.

**Intended Use of the Device:**

The EsteLux™ System is intended for permanent hair reduction, effective removal of unwanted hair, treatment of facial and leg veins, and treatment of pigmented lesions in all skin types (I-VI). The Cool Roller™ is an accessory providing pre-cooling of the skin and increased patient comfort.

**Performance Data:**

The differences in the specifications of the EsteLux™ and CoolRoller™, and the predicate devices do not result in different performance or raise new questions of safety or efficacy.

**Conclusion:**

Based on the foregoing, the EsteLux™ System and the CoolRoller™ are substantially equivalent to the legally-marketed claimed predicate devices, i.e., the ESC IPL™ Quantum HR and Laserscope CoolSpot™, respectively.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

MAY 10 2002

Palomar Medical Technologies, Inc.  
c/o Ms. Marcy Moore  
Manager of Clinical Studies  
131 Kelekent Lane  
Cary, NC 27511

Re: K020453

Trade/Device Name: EsteLux™ Pulsed Light System and CoolRoller™

Regulation Number: 878.4810

Regulation Name: Laser surgical instrument for use in general and  
plastic surgery and in dermatology

Regulatory Class: II

Product Code: GEX

Dated: February 8, 2002

Received: February 11, 2002

Dear Ms. Moore:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

*for Miriam C. Provost*  
Celia M. Witten, Ph.D., M.D.  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## INDICATIONS FOR USE STATEMENT

510(K) Number: K020453

Device Name: EsteLux™

Indications for Use:

The EsteLux™ Pulsed Light system is intended to for permanent hair reduction. It is also indicated for photocoagulation of dermatological vascular lesions, photothermolysis of blood vessels (treatment of facial and leg veins), and the treatment of benign pigmented lesions.

The CoolRoller™ is intended to provide pre-cooling of the epidermis, to reduce thermal injury to the epidermis, and to reduce pain and patient discomfort associated with light applications.

(Please do not write below this line - Continue on another page if needed)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use ☒

OR Over-the-Counter Use ☐  
(per 21 CFR 801.109)

Miriam C. Provost  
(Division Sign-Off)  
Division of General, Restorative  
and Neurological Devices

510(k) Number K020453